

Rec'd PCT/PTO 15 FEB 2005

Claims

Replaced by
ART 34 AMDT

1. A process for the manufacture of an acetylenically unsaturated alcohol by reacting a carbonyl compound with acetylene in the presence of ammonia and an alkali metal hydroxide, characterized in that the carbonyl compound is methyl ethyl ketone,
5 methylglyoxal dimethylacetal, 6-methyl-5-hepten-2-one, 6-methyl-5-octen-2-one, hexahydropseudoionone, 4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one or 6,10,14-trimethyl-2-pentadecanone, the alkali metal hydroxide is used in aqueous solution and the molar ratio of the alkali metal hydroxide to the carbonyl compound is less than 1 : 200.
- 10 2. A process according to claim 1, wherein the molar ratio of the alkali metal hydroxide to the carbonyl compound is from about 1 : 500 to 1 : 200.
3. A process according to claim 2, wherein the molar ratio of the alkali metal hydroxide to the carbonyl compound is from about 1 : 300 to about 1 : 220.
- 15 4. A process according to any one of claims 1 to 3, wherein the carbonyl compound is 6-methyl-5-hepten-2-one and the product is dehydrolinalool.
5. A process according to any one of claims 1 to 4, wherein the alkali metal hydroxide is potassium hydroxide.
- 20 6. A process according to any one of claims 1 to 5, wherein the reaction is effected at a temperature from about 0°C to about 40°C and the pressure is at an appropriate value, depending on the reaction temperature, from about 5 bar to about 20 bar (about 0.5 MPa to about 2 MPa) to maintain the ammonia in the liquefied state.
7. A process according to claim 6, wherein the reaction is effected at a temperature from about room temperature to about 35°C.
- 25 8. A process according to any one of claims 1 to 7, wherein the molar ratio of the acetylene to the carbonyl compound in the reaction mixture for carrying out the process is from about 2 : 1 to about 6 : 1.

BEST AVAILABLE COPY

Replaced by
ART 34 AMBT

9. A process according to any one of claims 1 to 8, wherein the molar ratio of ammonia to carbonyl compound in the reaction mixture for carrying out the process is from about 8 : 1 to about 35 : 1.

10. A process according to claim 9, wherein the molar ratio of ammonia to carbonyl
5 compound in the reaction mixture for carrying out the process is from about 10 : 1 to about 30 : 1.

11. A process according to any one of claims 1 to 10, wherein the reaction is effected in a continuous manner.
